

EXHIBIT 3

** CONFIDENTIAL **
IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

CISCO SYSTEMS, INC.,
Plaintiff,

v. No. 5:14-cv-05344-BLF

ARISTA NETWORKS, INC.,
Defendant.

_____ /

** CONFIDENTIAL **

VIDEOTAPED DEPOSITION OF JOHN R. BLACK, Ph.D.

THURSDAY, JUNE 30, 2016

SAN FRANCISCO, CALIFORNIA

DEBORAH MAYER, CSR 9654, RPR CRR CRP CLR

U.S. LEGAL SUPPORT - SAN FRANCISCO

June 30, 2016

2 to 5

<p style="text-align: right;">Page 2</p> <p>1 BE IT REMEMBERED, pursuant to Notice, that on</p> <p>2 Thursday, June 30, 2016, 9:05 a.m. - 5:46 p.m., at</p> <p>3 50 California Street, 21st Floor, San Francisco,</p> <p>4 California, 94111, before me, Deborah Mayer, a Certified</p> <p>5 Shorthand Reporter for the State of California, there</p> <p>6 personally appeared:</p> <p>7</p> <p>8 JOHN R. BLACK, Ph.D.,</p> <p>9</p> <p>10 called as a witness by the Plaintiff, who, being by me</p> <p>11 first duly sworn/affirmed, was thereupon examined and</p> <p>12 testified as hereinafter set forth.</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25 ///</p>	<p style="text-align: right;">Page 4</p> <p>1 I N D E X</p> <p>2</p> <p>3 Witness: Page</p> <p>4 JOHN R. BLACK, Ph.D.</p> <p>5 EXAMINATION BY MR. HOLMES 7</p> <p>6</p> <p>7</p> <p>8 S T I P U L A T I O N S</p> <p>9 Page Line</p> <p>10 MR. HOLMES: Thank you. For the record, we 268 21</p> <p>11 haven't seen it yet. It hasn't been</p> <p>12 produced to Cisco yet, so we'll have to take</p> <p>13 a look at it when it is....</p> <p>14 MR. WONG: Actually, can we designate this 285 12</p> <p>15 transcript confidential?</p> <p>16 THE REPORTER: Transcript order: Is there 286 2</p> <p>17 an expedite or rough, anything?</p> <p>18 MR. HOLMES: The rough, yes. Otherwise, no.</p> <p>19 MR. WONG: I think that's right. Same here.</p> <p>20</p> <p>21 M O T I O N T O S T R I K E</p> <p>22 Page Line</p> <p>23 MR. HOLMES: I'll just move to strike as 117 13</p> <p>24 nonresponsive, and I'll re-ask it.</p> <p>25 ///</p>
<p style="text-align: right;">Page 3</p> <p>1 A P P E A R A N C E S</p> <p>2</p> <p>3 FOR PLAINTIFF CISCO SYSTEMS, INC.:</p> <p>4 QUINN EMANUEL</p> <p>5 BY: ANDREW M. HOLMES, ESQ.</p> <p>6 50 California Street, 22nd Floor</p> <p>7 San Francisco, CA 94111</p> <p>8 (415) 875-6322</p> <p>9 drewholmes@quinnemanuel.com</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16 FOR DEFENDANT ARISTA NETWORKS, INC.:</p> <p>17 KECKER & VAN NEST</p> <p>18 BY: RYAN K.M. WONG, ESQ.</p> <p>19 633 Battery Street</p> <p>20 San Francisco, CA 94111</p> <p>21 (415) 773-6682</p> <p>22 rwong@kvn.com</p> <p>23</p> <p>24</p> <p>25</p> <p>26 ALSO PRESENT:</p> <p>27 PHILIP KNOWLES, Legal Video Specialist.</p> <p>28</p> <p>29</p> <p>30</p> <p>31</p> <p>32</p> <p>33</p> <p>34</p> <p>35 ///</p>	<p style="text-align: right;">Page 5</p> <p>1 E X H I B I T S</p> <p>2</p> <p>3 Plaintiff's: Page</p> <p>4 Exhibit 1550 Expert Report of 15</p> <p>5 John R. Black Jr., June 3, 2016.</p> <p>6 Exhibit 1551 Rebuttal Expert Report of 15</p> <p>7 John R. Black Jr.</p> <p>8 Exhibit 1552 Opening Report of Dr. Almeroth. 126</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25 ///</p>

June 30, 2016

6 to 9

<p style="text-align: right;">Page 6</p> <p>1 (Thursday, 6-30-2016, 9:05 a.m. - 5:46 p.m.)</p> <p>2 THE VIDEOGRAPHER: Good morning, counsel. We</p> <p>3 are now on the video record. This is the recorded video</p> <p>4 deposition of John Black in the matter of Cisco vs</p> <p>5 Arista, taken on behalf of the plaintiff.</p> <p>6 This deposition is taking place at 50</p> <p>7 California Street, 21st Floor, City of San Francisco,</p> <p>8 California, 94111, on June 30, 2016 at approximately</p> <p>9 9:05 a.m.</p> <p>10 My name is Philip Knowles. I'm the</p> <p>11 videographer with U.S. Legal Support, located at</p> <p>12 44 Montgomery Street, Suite 550, San Francisco,</p> <p>13 California, 94104.</p> <p>14 Video and audio recording will be taking place</p> <p>15 unless all counsel have agreed to go off the record.</p> <p>16 Would all present please identify themselves</p> <p>17 beginning with the witness.</p> <p>18 THE WITNESS: I'm John Black.</p> <p>19 MR. WONG: Ryan Wong from Kecker & Van Nest for</p> <p>20 defendant Arista Networks.</p> <p>21 MR. HOLMES: Drew Holmes from Quinn Emanuel on</p> <p>22 behalf of the plaintiff Cisco.</p> <p>23 THE VIDEOGRAPHER: Thank you, counsel. The</p> <p>24 certified court reporter is Deborah Mayer. Would you</p> <p>25 please swear in the witness.</p>	<p style="text-align: right;">Page 8</p> <p>1 Q. How many hours have you spent working on this</p> <p>2 case?</p> <p>3 A. Just to be clear, when you say "this case," the</p> <p>4 way I understand it, at the beginning, there were two</p> <p>5 patents, the '886 and the '526 --</p> <p>6 MR. WONG: Let me just caution the witness --</p> <p>7 THE WITNESS: Sure.</p> <p>8 MR. WONG: -- what you've said so far is fine,</p> <p>9 but I want to caution the witness not to get into the</p> <p>10 substance of any sort of attorney/client communications</p> <p>11 or any sort of trial strategy which you may or may not</p> <p>12 be privy to, okay.</p> <p>13 THE WITNESS: Understood.</p> <p>14 MR. WONG: So if you're going to talk about</p> <p>15 general retention assignment type things, please speak</p> <p>16 at a very high level. Understood?</p> <p>17 THE WITNESS: Understood.</p> <p>18 A. Once again, April 2015, my understanding from</p> <p>19 the Arista lawyers was that there were two patents,</p> <p>20 the '526 and the '886, as well as a copyright aspect to</p> <p>21 the complaint that Cisco had filed against Arista, and I</p> <p>22 was engaged in that lawsuit. Since that time, since</p> <p>23 late 2015, my attention has been restricted solely to</p> <p>24 the copyright issue, so there's been sort of a</p> <p>25 refinement or restriction narrowing my focus over time.</p>
<p style="text-align: right;">Page 7</p> <p>1 (Witness sworn.)</p> <p>2 EXAMINATION</p> <p>3 BY MR. HOLMES:</p> <p>4 Q. Good morning, Dr. Blsck.</p> <p>5 A. Good morning, Mr. Holmes.</p> <p>6 Q. Dr. Black, you've been deposed before, correct?</p> <p>7 A. I have.</p> <p>8 Q. How many times?</p> <p>9 A. Somewhere between five and 10.</p> <p>10 Q. And so is it fair to say that you understand</p> <p>11 that you're under oath here today?</p> <p>12 A. I do.</p> <p>13 Q. And you understood that you're required to tell</p> <p>14 the truth here today?</p> <p>15 A. I do.</p> <p>16 Q. Is there any reason why you can't do that?</p> <p>17 A. No.</p> <p>18 Q. Is there any reason why you can't give your</p> <p>19 best testimony here today?</p> <p>20 A. No reason.</p> <p>21 Q. Sir, you were engaged by Arista as an expert in</p> <p>22 this litigation, is that correct?</p> <p>23 A. Yes, I was.</p> <p>24 Q. When did you first begin working on this case?</p> <p>25 A. I believe it would be April of 2015.</p>	<p style="text-align: right;">Page 9</p> <p>1 BY MR. HOLMES:</p> <p>2 Q. If we take it from, you started April 2015 to</p> <p>3 the present, how many hours have you spent working on</p> <p>4 this case?</p> <p>5 A. I don't have an exact number. It would</p> <p>6 probably be in the neighborhood of 400 to 700 hours over</p> <p>7 that year and a half.</p> <p>8 Q. And do you know how many hours you spent</p> <p>9 specifically on issues related to the copyright</p> <p>10 infringement allegations in this case?</p> <p>11 A. It's really hard to tease out because in the</p> <p>12 beginning, some of the issues sort of spanned. Since</p> <p>13 I've been asked to narrow my focus, of course all of my</p> <p>14 attention has been paid just to the copyright.</p> <p>15 Certainly the majority of that time has been directed at</p> <p>16 the copyright aspect of this lawsuit. I mean if I had</p> <p>17 to roughly guess, between 60 and 85 percent of that</p> <p>18 time. I would really have to go back and look at that</p> <p>19 question more carefully.</p> <p>20 BY MR. HOLMES:</p> <p>21 Q. What is your hourly billing rate for this</p> <p>22 matter?</p> <p>23 A. 550.</p> <p>24 Q. And do you know how much you've billed in this</p> <p>25 case to date?</p>

June 30, 2016

66 to 69

<p style="text-align: right;">Page 66</p> <p>1 BY MR. HOLMES:</p> <p>2 Q. Have you ever held yourself out as an expert in</p> <p>3 copyright law?</p> <p>4 A. Not as a lawyer, no. I don't know what that</p> <p>5 means other than I'm not a lawyer. I have a paper, like</p> <p>6 I said, that talks about copyright law as a technical</p> <p>7 expert, but not as a lawyer. I wouldn't walk around</p> <p>8 saying I'm an expert in copyright law and people should</p> <p>9 listen to me when I opine about the law.</p> <p>10 Q. Fair enough. Do you consider yourself to be an</p> <p>11 expert in organizational behavior?</p> <p>12 MR. WONG: Objection, vague.</p> <p>13 A. I don't know what that is, so I guess I can't</p> <p>14 be an expert in something if I don't know what it is.</p> <p>15 BY MR. HOLMES:</p> <p>16 Q. Do you consider yourself to be an expert in</p> <p>17 economics?</p> <p>18 MR. WONG: Objection, vague.</p> <p>19 A. No.</p> <p>20 BY MR. HOLMES:</p> <p>21 Q. Do you consider yourself to be an expert in</p> <p>22 calculating damages?</p> <p>23 MR. WONG: Same objection, vague.</p> <p>24 A. Certainly in any technical questions that apply</p> <p>25 to my expertise, I might be helpful there, but I'm not a</p>	<p style="text-align: right;">Page 68</p> <p>1 A. I've certainly never said those words about</p> <p>2 myself, no.</p> <p>3 BY MR. HOLMES:</p> <p>4 Q. Have you ever held yourself out to be an expert</p> <p>5 in the creation of de facto standards?</p> <p>6 MR. WONG: Same objection.</p> <p>7 A. I've certainly never said those words about</p> <p>8 myself either, no.</p> <p>9 BY MR. HOLMES:</p> <p>10 Q. Are you currently a member of any standards</p> <p>11 organizations?</p> <p>12 A. I'm not sure. I may be a member of the IEEE, I</p> <p>13 would have to check. I'm a member of the IACR, which is</p> <p>14 the International Association for Cryptologic Research.</p> <p>15 Q. Is that a standards body?</p> <p>16 A. I'm actually not sure if we issue standards</p> <p>17 because I'm not involved in that part of the</p> <p>18 organization. We may not, actually. And that would be</p> <p>19 it.</p> <p>20 Q. Now, can you take a look at Exhibit 1 to your</p> <p>21 Opening Report and let me know if you've listed any</p> <p>22 membership in the IEEE.</p> <p>23 A. I don't think I list membership in any</p> <p>24 organizations, and I've been a member of various</p> <p>25 organizations, and I know some people do list that in</p>
<p style="text-align: right;">Page 67</p> <p>1 damages expert. I've never held myself out as a damages</p> <p>2 expert.</p> <p>3 BY MR. HOLMES:</p> <p>4 Q. Have you held yourself out as being an expert</p> <p>5 in consumer behavior?</p> <p>6 MR. WONG: Same objection, vague.</p> <p>7 A. Only to the extent that I can provide technical</p> <p>8 expertise, but not as any kind of behavioral expert or</p> <p>9 psychologist.</p> <p>10 BY MR. HOLMES:</p> <p>11 Q. Do you consider yourself to be an expert in the</p> <p>12 creation of industry standards?</p> <p>13 MR. WONG: Same objection, vague.</p> <p>14 A. I don't think there is such a thing as an</p> <p>15 expert in the creation of industry standards. I've</p> <p>16 participated in creating technology that has been</p> <p>17 standardized or attempted to be standardized in various</p> <p>18 fashions, but I don't think there can be something that</p> <p>19 you described as an "expert" in the creation of industry</p> <p>20 standards.</p> <p>21 BY MR. HOLMES:</p> <p>22 Q. So is it fair to say you've never held yourself</p> <p>23 out to be an expert in the creation of industry</p> <p>24 standards?</p> <p>25 MR. WONG: Objection, vague.</p>	<p style="text-align: right;">Page 69</p> <p>1 their academic CV. I should know where to look, right,</p> <p>2 it's my CV, but I don't see a list of professional</p> <p>3 organization memberships listed here.</p> <p>4 Q. So other than the IACR, as you sit here right</p> <p>5 now, are you aware of any other -- well, strike that.</p> <p>6 As you sit here right now, I believe your</p> <p>7 testimony was that you may be a member of the IEEE but</p> <p>8 you're not sure, you'd have to check; is that fair?</p> <p>9 A. That's fair.</p> <p>10 Q. Would you be able to check on a break, for</p> <p>11 instance?</p> <p>12 A. Maybe. I think so.</p> <p>13 Q. At the next break, maybe if you could do that</p> <p>14 I'd appreciate it so we can get that one out of the way.</p> <p>15 A. Sure.</p> <p>16 Q. Other than the IACR, are there any other</p> <p>17 organizations you're affiliated with on a regular basis?</p> <p>18 A. I also may be a member of the ACM. I certainly</p> <p>19 have been in the past. I'm sorry, I don't keep close</p> <p>20 track of this. My membership lapses. It's not a</p> <p>21 day-to-day part of my life, these memberships.</p> <p>22 Q. And is the ACM, is that a standards-setting</p> <p>23 body?</p> <p>24 A. I don't believe so.</p> <p>25 Q. Now, can you turn, please, Dr. Black, to page</p>

<p style="text-align: right;">Page 106</p> <p>1 intend to answer that question yes or no?</p> <p>2 MR. WONG: Same objections, argumentative,</p> <p>3 vague and ambiguous.</p> <p>4 A. I'm hoping that by the time that question would</p> <p>5 be considered by either attorney on either side that we</p> <p>6 will have established that the question makes no sense,</p> <p>7 and hopefully the jury would recognize that a</p> <p>8 nonsensical question is being asked.</p> <p>9 BY MR. HOLMES:</p> <p>10 Q. And so it's your testimony today that if that</p> <p>11 question is asked of you at trial, you will be of the</p> <p>12 opinion that the question itself is nonsensical and</p> <p>13 therefore you can't answer it?</p> <p>14 A. Certainly if I walked in off the street and I</p> <p>15 were asked that question and we hadn't done all the hard</p> <p>16 work to establish the foundations that I expressed in my</p> <p>17 answer, point-blank, my answer would be respectfully,</p> <p>18 sir, your answer -- your question does not make sense.</p> <p>19 Q. And that's what you would tell Arista's lawyers</p> <p>20 as well if they asked you that on the stand at trial?</p> <p>21 MR. WONG: Same objection.</p> <p>22 A. This is all speculation, right, you're asking</p> <p>23 me about how I would think, react, and make a statement</p> <p>24 six months from now. I don't know. I mean it's my</p> <p>25 position sitting here today that that question does not</p>	<p style="text-align: right;">Page 108</p> <p>1 is that I think about all these allegations and the</p> <p>2 questions you're asking and so forth.</p> <p>3 I'm sorry to add to an already long response,</p> <p>4 but these are all my opinions, and I certainly intend to</p> <p>5 offer these opinions at trial. But there may be more</p> <p>6 opinions based on this help description thing that's</p> <p>7 still pending, and I don't know if, when we get</p> <p>8 discovery, I may be asked to opine further, I think if I</p> <p>9 am that would be fair game to include as well. And I</p> <p>10 certainly don't know what I would say or even what my</p> <p>11 opinions will be around that, sitting here right now.</p> <p>12 BY MR. HOLMES:</p> <p>13 Q. Do you have any opinions about Cisco's</p> <p>14 allegations of help description copying as you sit here</p> <p>15 right now?</p> <p>16 A. I gave you some of those earlier. My main</p> <p>17 reaction is that I want there to be a lot more evidence</p> <p>18 before I can even start to undertake an investigation as</p> <p>19 to the merits of those allegations. I offer a few</p> <p>20 cursory comments in my Rebuttal Report, having spent</p> <p>21 probably 10 total minutes looking at the exhibit that</p> <p>22 lists those help description strings. But I've had</p> <p>23 nowhere near enough time to make even a rudimentary</p> <p>24 assessment of the merits of those allegations.</p> <p>25 Q. In formulating your opinions in this case, you</p>
<p style="text-align: right;">Page 107</p> <p>1 make sense. If we agree during the trial on different</p> <p>2 terminology, or the judge tells me to define a certain</p> <p>3 word a certain way, or if there's a hypothetical that</p> <p>4 says I want you to assume something, then I might answer</p> <p>5 differently, and I don't think I can speculate as to</p> <p>6 what's going to happen in a complex litigation six</p> <p>7 months from now.</p> <p>8 BY MR. HOLMES:</p> <p>9 Q. Well, you understand that the process of going</p> <p>10 through this deposition today is so that I understand</p> <p>11 what you're going to tell the jury, right, so that I</p> <p>12 understand what your opinions are going to be so we're</p> <p>13 not surprised later; that's the only fair way to do</p> <p>14 this, right?</p> <p>15 A. I don't understand that --</p> <p>16 MR. WONG: Objection, argumentative. Go ahead.</p> <p>17 THE WITNESS: Sorry.</p> <p>18 A. -- I don't understand the purpose of today's</p> <p>19 deposition is that you extract a prescribed transcript</p> <p>20 of what words I'm going to use when I'm at trial. I do</p> <p>21 think it's fair for you to ask me what my opinions are,</p> <p>22 and I'm really trying very hard, even though you may not</p> <p>23 think so, I'm trying very hard to be careful and to be</p> <p>24 fully forthcoming in qualifying what I say so that we</p> <p>25 can have a meeting of the minds and you can know what it</p>	<p style="text-align: right;">Page 109</p> <p>1 performed -- I don't know if you want to call it testing</p> <p>2 on certain Cisco and Arista products; is that fair?</p> <p>3 MR. WONG: Objection, vague.</p> <p>4 A. I certainly interacted with Cisco and Arista</p> <p>5 products as part of the work I did, yes.</p> <p>6 BY MR. HOLMES:</p> <p>7 Q. And how long did you spend interacting with</p> <p>8 Cisco products in formulating your opinions in this</p> <p>9 case?</p> <p>10 A. I mean to the extent that my interaction with</p> <p>11 Cisco products reaches back decades, and that in some</p> <p>12 sense, all of my experience with Cisco products helped</p> <p>13 inform my opinions, because I think it was helpful that</p> <p>14 I knew fundamental operation of Cisco products for a</p> <p>15 long time. My experience with Arista is much more</p> <p>16 recent. And so I don't know if you'd like me to sum up</p> <p>17 every moment of experience on Cisco products going back</p> <p>18 to my first experience, or if you want to talk about</p> <p>19 deliberate interactions with Cisco products directed at</p> <p>20 specific questions regarding a litigation?</p> <p>21 Q. Well, my question was specifically, about how</p> <p>22 many hours did you spend with Arista (sic) products to</p> <p>23 formulate your opinions in this report -- in these</p> <p>24 reports?</p> <p>25 A. So I think you just changed to Arista in</p>

June 30, 2016

118 to 121

<p style="text-align: right;">Page 118</p> <p>1 parsers. Are you now asking me now to imagine a new</p> <p>2 parser that accepts as valid a given command</p> <p>3 abstraction?</p> <p>4 BY MR. HOLMES:</p> <p>5 Q. That's correct.</p> <p>6 A. Okay, with that in mind, I'm sorry to be</p> <p>7 difficult. Could you re-ask the question?</p> <p>8 Q. Sure. Just a hypothetical.</p> <p>9 A. I'm with you now.</p> <p>10 Q. So if I take a command abstraction, right, out</p> <p>11 of a document, it's literally in the document, then I go</p> <p>12 and create a parser that is able to accept that command</p> <p>13 abstraction, is that mimicking?</p> <p>14 A. So I'll ask you a clarifying question. In</p> <p>15 my -- in my parser, this hypothetical parser we're now</p> <p>16 imagining, is there a command abstraction literally</p> <p>17 present in the source code of that parser? Because I</p> <p>18 can write a parser that simply accepts everything, very</p> <p>19 easy to write, right, I can write a parser that rejects</p> <p>20 everything. If I write one that accepts everything,</p> <p>21 then it would accept the particular example you're</p> <p>22 giving me in your question.</p> <p>23 Another way I can do it is I could literally</p> <p>24 have a copy of that command abstraction in my parser and</p> <p>25 say if what Mr. Holmes enters matches this, then output</p>	<p style="text-align: right;">Page 120</p> <p>1 and provide a response to it, is that copying or</p> <p>2 mimicking in your opinion?</p> <p>3 MR. WONG: Objection, vague, incomplete</p> <p>4 hypothetical.</p> <p>5 A. So let's take -- since I'm having a hard time</p> <p>6 with the vagueness, let's take the example I gave where</p> <p>7 I write a parser that accepts all strings. That's easy</p> <p>8 to do. Then certainly the command abstraction you have</p> <p>9 in mind, whatever it is, is accepted as valid. Is that</p> <p>10 copying or mimicking? I can't see how one could</p> <p>11 conceptually agree in that specific case.</p> <p>12 BY MR. HOLMES:</p> <p>13 Q. Why not?</p> <p>14 A. Because to mimic, there has to be similar</p> <p>15 behavior. And since words written on a page have no</p> <p>16 behavior that I can discern, then that question is</p> <p>17 completely and trivially no. Was there literal copying</p> <p>18 of that command abstraction? Well, my parser is</p> <p>19 basically three lines long; it just says okay to</p> <p>20 everything you type. And so how one could conceivably</p> <p>21 say that command abstraction has been copied into my</p> <p>22 product, I don't see how you could get there. So I</p> <p>23 think that one is also trivially no.</p> <p>24 MR. HOLMES: Okay, great, let's take a break.</p> <p>25 THE VIDEOGRAPHER: This marks the end of DVD 2</p>
<p style="text-align: right;">Page 119</p> <p>1 valid; otherwise, output invalid. That's a different</p> <p>2 way to write a parser. So in the sense you're just</p> <p>3 saying "a parser that accepts," I don't know what the</p> <p>4 source code for that parser would look like, and that</p> <p>5 is a pretty important question to ask.</p> <p>6 Q. Let's take it in two steps then. Let's assume</p> <p>7 in the first instance the parser accepts the command</p> <p>8 literally, it's literally in the source code; is that</p> <p>9 mimicking?</p> <p>10 MR. WONG: Objection, incomplete hypothetical.</p> <p>11 A. No, because mimicking is copying of behavior.</p> <p>12 And the literal expression of a command abstraction as</p> <p>13 it sits on a page isn't exhibiting any behavior, so you</p> <p>14 can't copy a behavior that's not exhibited.</p> <p>15 Now, going beyond your question, how did that</p> <p>16 command abstraction get into the source code, that's a</p> <p>17 separate thing, and I would be comfortable using the</p> <p>18 word "copy" if the way that it got there was somebody</p> <p>19 deliberately cut and pasted or consciously transcribed</p> <p>20 letter-for-letter from that page into the source code;</p> <p>21 but that's copying, not mimicking, by my understanding.</p> <p>22 BY MR. HOLMES:</p> <p>23 Q. Yeah. And so in the alternative hypothetical</p> <p>24 parser where the command abstraction is not literally</p> <p>25 present but the parser is able to accept it and parse it</p>	<p style="text-align: right;">Page 121</p> <p>1 in the deposition of John Black. The time is 12:10 p.m.</p> <p>2 Counsel, we're going off the record.</p> <p>3 (Recess taken.)</p> <p>4 THE VIDEOGRAPHER: Counsel, we're now back on</p> <p>5 the record. This is the beginning of DVD 3 to the</p> <p>6 deposition of John Black. The time is 9 -- sorry,</p> <p>7 12:56 p.m.</p> <p>8 THE WITNESS: Mr. Holmes, you asked me to look</p> <p>9 during the break at my IEEE membership status. I've</p> <p>10 done that, if you want to start there?</p> <p>11 BY MR. HOLMES:</p> <p>12 Q. Sure, what did you find?</p> <p>13 A. So I'm not a member of IEEE.</p> <p>14 Q. Thank you for that.</p> <p>15 I would like to direct your attention to page 8</p> <p>16 of your Opening Report, page 8 paragraph 8, the heading</p> <p>17 "summary of opinions." Let me know when you're there.</p> <p>18 A. And I'm sorry to go back again to something</p> <p>19 else that I thought of just a minute ago that is a more</p> <p>20 complete response to one of your earlier questions. If</p> <p>21 I'm permitted to do that for a moment?</p> <p>22 Q. Sure. If you feel like you need to clarify the</p> <p>23 record for some reason, please go ahead.</p> <p>24 A. We were talking about the creation of</p> <p>25 standards, and I forgot to mention that there is a group</p>

June 30, 2016

122 to 125

<p style="text-align: right;">Page 122</p> <p>1 called NIST, National Institute of Standards and</p> <p>2 Technology, you've probably heard of them. A lot of the</p> <p>3 work I've done, they're the appropriate standardization</p> <p>4 body. They're not a group that takes membership, so I</p> <p>5 don't have membership with them.</p> <p>6 But I've participated in their workshops, I've</p> <p>7 gone to their headquarters in Washington and supported</p> <p>8 various algorithms, protocols and so forth that I've</p> <p>9 helped invent to try to promulgate standardization. In</p> <p>10 some cases, that's been successful. So you can find</p> <p>11 NIST standards that carry my name. You can also find --</p> <p>12 I'm sorry, you can also find RFCs that have my name,</p> <p>13 which is a different body as you're well aware.</p> <p>14 BY MR. HOLMES:</p> <p>15 Q. Are you currently actively involved with NIST?</p> <p>16 A. Only in a remote sense that I've, within the</p> <p>17 past couple of years, offered some comments in response</p> <p>18 to a proposed standard, but I'm not myself attempting to</p> <p>19 promote something -- some of my work for standardization</p> <p>20 under the NIST heading.</p> <p>21 Q. When was the last time you participated in a</p> <p>22 NIST workshop?</p> <p>23 A. Probably 2011. There was one that met during</p> <p>24 the crypto conference in Santa Barbara; I was on</p> <p>25 sabbatical at that time and I remember sitting in on</p>	<p style="text-align: right;">Page 124</p> <p>1 summarized it correctly.</p> <p>2 Q. Now, have you provided any opinions in either</p> <p>3 one of your reports with respect to the technical</p> <p>4 documents that Cisco has accused Arista of copying?</p> <p>5 MR. WONG: Objection, vague.</p> <p>6 A. Could you clarify what you mean by "technical</p> <p>7 documents"? Do you mean user manuals or more than</p> <p>8 that?</p> <p>9 BY MR. HOLMES:</p> <p>10 Q. I mean Cisco documents that could include user</p> <p>11 manuals and other Cisco documents that relate to its</p> <p>12 operating systems and its CLI.</p> <p>13 A. So you would encompass like technical documents</p> <p>14 and so forth --</p> <p>15 Q. Yes?</p> <p>16 A. -- internal specifications, those sorts of</p> <p>17 things?</p> <p>18 Q. That's correct.</p> <p>19 A. Thank you. Um, I'm actually not aware of any</p> <p>20 allegations that include those kinds of latter technical</p> <p>21 documents, internal functional documents, code</p> <p>22 descriptions, those sorts of things. I believe that</p> <p>23 some of the copyright registrations that Cisco holds has</p> <p>24 words something like "and associated documentation";</p> <p>25 some of them do. I haven't done any analysis on any</p>
<p style="text-align: right;">Page 123</p> <p>1 one of their meetings at that time. That was with</p> <p>2 respect to hash functions.</p> <p>3 Q. Have you ever held any leadership positions at</p> <p>4 NIST?</p> <p>5 MR. WONG: Objection, vague.</p> <p>6 A. No. Those positions are held by employees, not</p> <p>7 by outsiders.</p> <p>8 BY MR. HOLMES:</p> <p>9 Q. Okay, well, thank you for that.</p> <p>10 Now, page 8 starting at paragraph 8, you've</p> <p>11 got -- this section is entitled "summary of opinions,"</p> <p>12 right?</p> <p>13 A. Yes, it is.</p> <p>14 Q. Okay. And from paragraphs 8, 9, 10, 11, right,</p> <p>15 that's sort of the paragraphs that are within this</p> <p>16 subsection; is that fair?</p> <p>17 A. It appears there are so-numbered paragraphs,</p> <p>18 yes.</p> <p>19 Q. Now, if I understand your summary of opinions,</p> <p>20 you provided opinions here about modes, prompts --</p> <p>21 you've used the word "command," so I'm using it as</p> <p>22 you've used it, "hierarchies" and "responses" in these</p> <p>23 paragraphs. Is that a fair characterization?</p> <p>24 A. I'd have to review these few paragraphs, but I</p> <p>25 think, just looking at paragraph 8, you seem to have</p>	<p style="text-align: right;">Page 125</p> <p>1 documentation of the sort that are not user manuals, for</p> <p>2 one thing.</p> <p>3 I know that Professor Almeroth has talked about</p> <p>4 user manuals in his reports. And I certainly have</p> <p>5 looked at a huge number of manuals in the scraping work</p> <p>6 that I did for the analysis that are in my two reports.</p> <p>7 And I think I make a passing remark in my Rebuttal</p> <p>8 Report saying that some of the quoted citations that</p> <p>9 Professor Almeroth includes, I looked in the most recent</p> <p>10 manual, Arista manual, couldn't find them. But I didn't</p> <p>11 do an extensive analysis going back to prior manuals,</p> <p>12 except in one case, I looked at a couple of old manuals</p> <p>13 just yesterday to try to understand one of the charts in</p> <p>14 Professor Almeroth's Rebuttal Report. But that's the</p> <p>15 extent of my manual analysis.</p> <p>16 Q. Okay. And do you remember that Dr. Almeroth</p> <p>17 included in an exhibit with his Opening Report that set</p> <p>18 forth, in his opinion, what the evidence was that Arista</p> <p>19 had copied certain Cisco documents?</p> <p>20 MR. WONG: Objection, vague.</p> <p>21 A. Unfortunately I have my own report. It's much</p> <p>22 more present in my mind than his. I'm trying to</p> <p>23 recall -- I mean if you'd let me see a copy, it would be</p> <p>24 helpful if that's possible.</p> <p>25 (Pause in the proceedings.)</p>

June 30, 2016

182 to 185

<p style="text-align: right;">Page 182</p> <p>1 BY MR. HOLMES:</p> <p>2 Q. How many prompts are part of the industry</p> <p>3 standard CLI?</p> <p>4 A. By "prompt," do you mean the host name and the</p> <p>5 rest of the letters that precede the final character</p> <p>6 which is an angle bracket or hash mark, or do you just</p> <p>7 mean angle bracket hash mark, or do you mean what did I</p> <p>8 mean in this context?</p> <p>9 BY MR. HOLMES:</p> <p>10 Q. In the context of paragraph 171 where you've</p> <p>11 defined industry standard CLI, you've used the term</p> <p>12 "command prompts," right?</p> <p>13 A. I have.</p> <p>14 Q. My question is, as you've used the term</p> <p>15 "command prompts," how many command prompts are part of</p> <p>16 the industry standard CLI?</p> <p>17 A. So to a large extent, prompts are married to</p> <p>18 modes. So you get a different prompt in user exec, a</p> <p>19 different one in privileged exec, a different one in</p> <p>20 global config, a different one in interface</p> <p>21 configuration. So those four modes that I enumerated a</p> <p>22 minute ago have associated prompts, and I would say they</p> <p>23 are at least those four prompts, and I've shown again in</p> <p>24 the appendix that those prompts, or very similar ones,</p> <p>25 are adopted across the industry, so I'd say at least</p>	<p style="text-align: right;">Page 184</p> <p>1 of formulating your opinions for this case?</p> <p>2 A. Many times.</p> <p>3 Q. And was the command response that you got using</p> <p>4 a Cisco device similar to the command response that you</p> <p>5 got when you used the Arista device?</p> <p>6 MR. WONG: Objection, vague.</p> <p>7 A. Yes, and similar to what I got when I used a</p> <p>8 Dell device, when I used a Juniper device, Junos E</p> <p>9 device, and so forth, yes.</p> <p>10 BY MR. HOLMES:</p> <p>11 Q. When you used the Dell device, did you use that</p> <p>12 in the context of formulating your opinions in this</p> <p>13 case?</p> <p>14 MR. WONG: Objection, vague.</p> <p>15 A. Only in the sense that I know that's what it</p> <p>16 does from prior use, but I didn't make a trip to campus</p> <p>17 while drafting my report to verify that memory.</p> <p>18 BY MR. HOLMES:</p> <p>19 Q. Same question with respect to Junos E. During</p> <p>20 the process of preparing this report, did you interact</p> <p>21 with the Junos E device to verify that the command</p> <p>22 response that it outputs is the same as the command</p> <p>23 response that was outputted by Cisco and Arista?</p> <p>24 MR. WONG: Objection, vague.</p> <p>25 A. I relied on my memory of that interaction. I</p>
<p style="text-align: right;">Page 183</p> <p>1 those four.</p> <p>2 Q. Can you think of any others?</p> <p>3 A. I think that some of the others are in a gray</p> <p>4 area where people might disagree. I think no one would</p> <p>5 disagree for those four, so I'd say once again at least</p> <p>6 those four.</p> <p>7 Q. And you also list as a common feature in</p> <p>8 functionality in paragraph 171 "command responses"; how</p> <p>9 many command responses are part of the industry</p> <p>10 standard CLI?</p> <p>11 A. Once again, I don't have a specific threshold</p> <p>12 to give you. It's not a number that I can set forth.</p> <p>13 Q. Can you give me an example of a command</p> <p>14 response that is part of the industry standard CLI?</p> <p>15 A. Um, when I say "show IP interface brief," I get</p> <p>16 on each line a list of every interface which will vary,</p> <p>17 depending on the device. But it's the format that I</p> <p>18 expect to see, and in every case I've ever issued that</p> <p>19 command on an industry standard CLI, that's what</p> <p>20 comes out.</p> <p>21 Q. Did you test that particular command when you</p> <p>22 interacted with the Cisco device?</p> <p>23 A. For a couple of decades, yes.</p> <p>24 Q. Did you input that specific command when you</p> <p>25 were interacting with Cisco's devices during the process</p>	<p style="text-align: right;">Page 185</p> <p>1 didn't go and verify it while drafting my report.</p> <p>2 BY MR. HOLMES:</p> <p>3 Q. Just to be clear, I just want to make sure I</p> <p>4 have an understanding of what you relied on in preparing</p> <p>5 your report. I don't recall in your reports that you</p> <p>6 disclosed that you relied on the use of a Dell device or</p> <p>7 a Junos E device in formulating your opinions in this</p> <p>8 case; do you know if you did or didn't disclose that?</p> <p>9 A. I believe I relied on all my experience,</p> <p>10 training, and research and consulting work throughout my</p> <p>11 career, not every minute of it of course is relevant to</p> <p>12 this, but certainly the times I've written CLIs,</p> <p>13 parsers, the times I've looked at any source code, the</p> <p>14 times that I've interacted with these devices I just</p> <p>15 described helped inform my opinions. Even if I don't</p> <p>16 explicitly enumerate every experience in my career, I</p> <p>17 oftentimes rely on those experiences as part of what</p> <p>18 makes up my qualifications.</p> <p>19 BY MR. HOLMES:</p> <p>20 Q. How many CLI commands would a vendor need to</p> <p>21 adopt in order to be compliant with the industry</p> <p>22 standard CLI?</p> <p>23 MR. WONG: Objection, incomplete hypothetical.</p> <p>24 A. Once again, there is no specific threshold that</p> <p>25 I have in mind that says if you're below this number</p>

June 30, 2016

186 to 189

<p style="text-align: right;">Page 186</p> <p>1 you're not, and if you're above this number you are. I</p> <p>2 think that that number isn't even relevant because we</p> <p>3 have such overwhelming evidence that there are hundreds</p> <p>4 of commands, command abstractions, adopted by a large</p> <p>5 number of vendors, as I've painstakingly laid out in my</p> <p>6 appendices that would fall under anyone's definition of</p> <p>7 what "widespread adoption" means.</p> <p>8 BY MR. HOLMES:</p> <p>9 Q. How many -- strike that.</p> <p>10 How many hierarchies would a vendor need to</p> <p>11 adopt in order to be compliant with the industry</p> <p>12 standard CLI?</p> <p>13 MR. WONG: Same objections.</p> <p>14 A. As I stated before, hierarchies are directly</p> <p>15 related to the commands in my view, and therefore my</p> <p>16 answer is the same, that it would depend on the number</p> <p>17 of commands, and the number of commands I don't have a</p> <p>18 specific threshold for, but the evidence is clear here</p> <p>19 that there's widespread adoption and we don't need a</p> <p>20 specific number.</p> <p>21 BY MR. HOLMES:</p> <p>22 Q. And how many command modes would a vendor need</p> <p>23 to adopt in order to be compliant with the industry</p> <p>24 standard CLI?</p> <p>25 A. I would say there, to pass muster by most</p>	<p style="text-align: right;">Page 188</p> <p>1 command hierarchies, command modes,</p> <p>2 command prompts, and command responses."</p> <p>3 Do you remember that?</p> <p>4 A. I see it in fact.</p> <p>5 Q. And you also say:</p> <p>6 "And cover the accused aspects of the</p> <p>7 Arista EOS CLI accused by Cisco in this</p> <p>8 litigation," right?</p> <p>9 A. A little redundant. I say accused twice.</p> <p>10 Q. Are there any features and functionalities that</p> <p>11 you excluded from this list that, in your opinion,</p> <p>12 should be included in the definition of industry</p> <p>13 standard CLI?</p> <p>14 A. Yes, there are some other features. I would</p> <p>15 include, among what's expected, the features expected by</p> <p>16 most users.</p> <p>17 Q. Can you please identify those features.</p> <p>18 A. I probably can't give you a complete list but I</p> <p>19 can give you a number of examples.</p> <p>20 So when I sit down at a CLI for a networking</p> <p>21 device, I expect, if it's industry standard, I expect</p> <p>22 that when I hit some keys on the keyboard that those</p> <p>23 keys will be echoed back to me. And you probably know</p> <p>24 that's not necessarily a technical requirement. There</p> <p>25 are times when you type and you don't see the keys</p>
<p style="text-align: right;">Page 187</p> <p>1 people's expectations, you'd need at least those four</p> <p>2 that we talked about, perhaps more, but at least those</p> <p>3 four would be expected.</p> <p>4 Q. How many command prompts would -- strike that.</p> <p>5 How many command prompts would a vendor need to</p> <p>6 adopt in order to be compliant with the industry</p> <p>7 standard CLI?</p> <p>8 A. Once again I view prompts as being married to</p> <p>9 modes, so I would say the same thing, at least four.</p> <p>10 Those are the same four I've talked about.</p> <p>11 Q. And how many command responses would need to be</p> <p>12 adopted by a vendor in order to be compliant with the</p> <p>13 industry standard CLI?</p> <p>14 MR. WONG: Same objection, incomplete</p> <p>15 hypothetical.</p> <p>16 A. Once again, I don't have a particular number in</p> <p>17 mind. I would think that there's an expectation that</p> <p>18 responses will look a certain way, and in my</p> <p>19 investigation they do, across all -- numerous vendors.</p> <p>20 Therefore, I think that we don't need a precise number.</p> <p>21 BY MR. HOLMES:</p> <p>22 Q. So in the last sentence of paragraph 171 you</p> <p>23 say:</p> <p>24 "These common features and</p> <p>25 functionalities include CLI commands,</p>	<p style="text-align: right;">Page 189</p> <p>1 echoed back, like when you're typing a password. So</p> <p>2 that behavior I expect, and that's from the beginning of</p> <p>3 time really.</p> <p>4 When I hit backspace, I expect the last</p> <p>5 character to be erased. When I hit the left arrow, I</p> <p>6 expect the cursor to move, without erasing, left on my</p> <p>7 screen through the characters that are already typed.</p> <p>8 Obviously right arrow should do the reverse, move the</p> <p>9 cursor to the right. I should be able to hit up arrow</p> <p>10 and review previously-issued commands in case I want to</p> <p>11 re-issue them with some edits. When I hit down arrow, I</p> <p>12 should go back down through the command history.</p> <p>13 When I hit question mark, I should get a list</p> <p>14 of available options to type wherever I am, even if I'm</p> <p>15 in the middle of a command or in the middle of a command</p> <p>16 word. Optional ways to complete the word I'm in the</p> <p>17 middle of should be given in a context-sensitive manner.</p> <p>18 If I'm in the middle of a word or middle of a</p> <p>19 command and I hit tab, it should auto-complete that word</p> <p>20 for me provided the prefix I've typed in is unambiguous.</p> <p>21 If I choose not to hit tab, the prefix I've typed in, if</p> <p>22 it's unambiguous, should be taken to mean the full word</p> <p>23 that completes it.</p> <p>24 These kinds of behaviors are standard across</p> <p>25 all these industry standard CLIs, they all existed in</p>

June 30, 2016

190 to 193

<p style="text-align: right;">Page 190</p> <p>1 CLIs prior to Cisco's founding, and I would group those</p> <p>2 in with these other features that I've identified.</p> <p>3 Q. But you do not list them in paragraph 171,</p> <p>4 correct?</p> <p>5 A. No. Here, I was focused simply on the accused</p> <p>6 aspects of CLI that Cisco had identified.</p> <p>7 Q. I'm not sure I understand your answer.</p> <p>8 A. They're not there.</p> <p>9 Q. You do not list those additional features in</p> <p>10 paragraph 171, correct?</p> <p>11 A. In 171, I restrict to the accused elements.</p> <p>12 I do talk about those features elsewhere in the report</p> <p>13 though.</p> <p>14 Q. You haven't included in your list in paragraph</p> <p>15 171 user manuals, correct?</p> <p>16 A. No, I have not included manuals.</p> <p>17 Q. Did you include any documents in your list of</p> <p>18 common features and functionalities in paragraph 171?</p> <p>19 MR. WONG: Objection, vague.</p> <p>20 A. No. In fact I wouldn't consider manuals or</p> <p>21 technical documents to be part of the CLI.</p> <p>22 BY MR. HOLMES:</p> <p>23 Q. And you also didn't list help descriptions in</p> <p>24 paragraph 171, correct?</p> <p>25 A. I did not and I certainly would have, had those</p>	<p style="text-align: right;">Page 192</p> <p>1 MR. WONG: Objection, vague.</p> <p>2 A. It is, even though it's not perfectly</p> <p>3 conforming, I would consider it to be industry standard.</p> <p>4 BY MR. HOLMES:</p> <p>5 Q. Is Cisco's XR CLI an industry standard CLI in</p> <p>6 your opinion?</p> <p>7 MR. WONG: Same objections.</p> <p>8 A. With the proviso there are some differences.</p> <p>9 Overall, I would say it is.</p> <p>10 BY MR. HOLMES:</p> <p>11 Q. And is Cisco's IOS XE CLI an industry standard</p> <p>12 CLI in your opinion?</p> <p>13 MR. WONG: Same objections.</p> <p>14 A. With the same provisos, yes, I believe it is.</p> <p>15 BY MR. HOLMES:</p> <p>16 Q. Now, paragraph 172, paragraph 172 reads:</p> <p>17 "Both the Cisco IOS CLI and the Arista</p> <p>18 EOS CLI support the industry standard CLI</p> <p>19 as well as numerous other networking</p> <p>20 vendors discussed in this and other</p> <p>21 sections of my report." Do you see that?</p> <p>22 A. I do.</p> <p>23 Q. And that's your opinion?</p> <p>24 A. Yes, it is.</p> <p>25 Q. Now, when you say:</p>
<p style="text-align: right;">Page 191</p> <p>1 allegations come in a timely manner. I think it's</p> <p>2 relevant to include those in the list of items</p> <p>3 considered; just no way I had time.</p> <p>4 Q. I think you testified earlier you were made</p> <p>5 aware of the help description allegations at least by</p> <p>6 May 27th; is that fair?</p> <p>7 A. I think either the 27th or to the 28th, which</p> <p>8 would have been a Saturday.</p> <p>9 Q. And this Opening Report was submitted on</p> <p>10 June 3rd, correct?</p> <p>11 A. Yes, it was.</p> <p>12 Q. Now, do you consider Cisco's NX-OS CLI to be</p> <p>13 compliant with your definition of the industry standard</p> <p>14 CLI?</p> <p>15 MR. WONG: Objection, vague.</p> <p>16 A. For the most part, it has some differences from</p> <p>17 what I expect, but I think it still conforms to the</p> <p>18 industry standards. I think I could get through it</p> <p>19 without a manual, figure things out. For the most part,</p> <p>20 the prompts, the commands, the hierarchies, the modes</p> <p>21 are what I would expect.</p> <p>22 BY MR. HOLMES:</p> <p>23 Q. So in your -- strike that.</p> <p>24 So in your opinion, is Cisco's NX-OS CLI an</p> <p>25 industry standard CLI?</p>	<p style="text-align: right;">Page 193</p> <p>1 "Both the Cisco IOS CLI and the Arista</p> <p>2 EOS CLI support the industry standard CLI,"</p> <p>3 are you saying that they are using the same CLI?</p> <p>4 MR. WONG: Objection, vague.</p> <p>5 A. So once again, when we say "CLI," we have to be</p> <p>6 careful. Do we mean source code, do we mean the</p> <p>7 experience? Obviously the source code is different. So</p> <p>8 I'll take that question to mean the interactive</p> <p>9 experience. I just stated a minute ago that there are</p> <p>10 details within NX-OS and various IOS variance, and we</p> <p>11 have to be careful when I say "Cisco EOS CLI," there are</p> <p>12 variants, and there are different releases and versions</p> <p>13 and so forth.</p> <p>14 So I'm taking them collectively to mean --</p> <p>15 which is what Professor Almeroth also does -- to mean a</p> <p>16 collection of those CLIs together. I'm sorry, I</p> <p>17 probably forgot to answer your question.</p> <p>18 MR. HOLMES: It's okay.</p> <p>19 BY MR. HOLMES:</p> <p>20 Q. So when you say that both the Cisco IOS CLI and</p> <p>21 Arista EOS CLI support the --</p> <p>22 (Reporter clarification.)</p> <p>23 MR. HOLMES: I'll rephrase the question.</p> <p>24 BY MR. HOLMES:</p> <p>25 Q. So when you say that both the Cisco IOS CLI and</p>

June 30, 2016

194 to 197

<p style="text-align: right;">Page 194</p> <p>1 the Arista EOS CLI support the industry standard CLI, is</p> <p>2 it your opinion that Cisco's IOS CLI and Arista's EOS</p> <p>3 CLI are similar?</p> <p>4 MR. WONG: Objection, vague.</p> <p>5 A. In the elements that I've enumerated, and some</p> <p>6 of the ones we talked about that aren't in the list in</p> <p>7 171, they are similar just like the 18 other vendors are</p> <p>8 similar.</p> <p>9 BY MR. HOLMES:</p> <p>10 Q. Will you take a look at paragraph 180 please of</p> <p>11 your Opening Report.</p> <p>12 A. I'm there.</p> <p>13 Q. Sorry, 178.</p> <p>14 A. 78? I'm there.</p> <p>15 Q. Okay. In paragraph 178 you say:</p> <p>16 "As shown in this section of my report,</p> <p>17 it is my opinion the accused command modes</p> <p>18 and prompts listed in Exhibit C to Cisco's</p> <p>19 interrogatory responses are supported by</p> <p>20 the vast majority of networking equipment</p> <p>21 vendors I examined for this report, and</p> <p>22 that the disputed command modes and prompts</p> <p>23 are part of the industry standards CLI that</p> <p>24 users of networking equipment expect."</p> <p>25 Do you see that?</p>	<p style="text-align: right;">Page 196</p> <p>1 didn't consider in my analysis. I went to Wikipedia</p> <p>2 last night just to find out, and the first one I saw was</p> <p>3 Aerohive, A-E-R-O-H-I-V-E. The manuals were in Korean.</p> <p>4 They apparently sell a switch. I didn't include that in</p> <p>5 my analysis, and I probably wouldn't have even if I</p> <p>6 stumbled across them.</p> <p>7 I found other vendors like TPLink, which I only</p> <p>8 knew for their sales of wireless unmanaged switches, but</p> <p>9 apparently they do have a managed switch. It has a GUI,</p> <p>10 it doesn't have a CLI, so I would not have included it</p> <p>11 in my analysis of other vendors of CLIs. So I certainly</p> <p>12 am aware of vendors that I did not include, and I would</p> <p>13 never claim that I got everybody.</p> <p>14 Q. And so can you walk me through your methodology</p> <p>15 for how you determined which vendors to select?</p> <p>16 A. Sure. So I wanted to get all of the major</p> <p>17 players for sure. And that was easy for me because I've</p> <p>18 been around and I kind of know who they are. So those</p> <p>19 immediately went on the list.</p> <p>20 There are some that, in my perception, aren't</p> <p>21 big players, or I didn't think of because they're small</p> <p>22 fries in the market. And sometimes Arista's lawyers</p> <p>23 would say here are some more to consider, and they would</p> <p>24 give me the manuals produced by those vendors. I could</p> <p>25 throw them into the pool.</p>
<p style="text-align: right;">Page 195</p> <p>1 A. I see that.</p> <p>2 Q. And that's your opinion?</p> <p>3 A. It is.</p> <p>4 Q. What is a "command mode"?</p> <p>5 A. A command mode is the state of the parser. So</p> <p>6 that when you're in one mode, the prompt is different</p> <p>7 from other modes, and the set of available commands that</p> <p>8 you have available to type in as valid commands within</p> <p>9 that mode is often different from in other modes. But</p> <p>10 the technical answer is, it's a state of the parser.</p> <p>11 Q. And when you say "vast majority" in paragraph</p> <p>12 178, what do you mean?</p> <p>13 A. I think that's qualified by vast majority of</p> <p>14 vendors I examined. And so I mean that almost all of</p> <p>15 the vendors I examined qualify under my statement here.</p> <p>16 Q. Now, in performing your analysis in preparing</p> <p>17 these reports, did you analyze every networking</p> <p>18 equipment vendor in the industry?</p> <p>19 MR. WONG: Objection, vague.</p> <p>20 A. I certainly included every vendor I could think</p> <p>21 of. I learned some more of them along the way as I read</p> <p>22 some of the evidence and documents. I know that it's</p> <p>23 Professor Almeroth's contention that I missed more than</p> <p>24 20. He cites to Wikipedia in his deposition transcript.</p> <p>25 So there are definitely some that I didn't think of or</p>	<p style="text-align: right;">Page 197</p> <p>1 I learned about Procket which I've never heard</p> <p>2 about before because of Tony Lee's deposition testimony.</p> <p>3 I heard of Tail-F, although I shouldn't include them</p> <p>4 because they're not in the list of vendors.</p> <p>5 There was another one, now I'm losing who it</p> <p>6 was -- there was another small player that was mentioned</p> <p>7 in the course of my reading one of the depo transcripts</p> <p>8 and I went oh, there's another one I added to the list</p> <p>9 because I thought it was relevant -- oh, I'm sorry,</p> <p>10 NextTop was the one I was trying to remember. I'd never</p> <p>11 heard of them before. And so as a few of these actors</p> <p>12 came into my mind and then into my report as a result of</p> <p>13 their being mentioned along the way.</p> <p>14 Q. Did you do anything else to try to locate</p> <p>15 vendors who you felt might be worth investigating when</p> <p>16 formulating your opinions about which vendors comply</p> <p>17 with or don't comply with the industry standard CLI as</p> <p>18 you've defined that term?</p> <p>19 A. I mean I did, as a spot-check, do a shopping</p> <p>20 query for network switches to make sure there wasn't</p> <p>21 something obvious that I've been missing. Didn't find</p> <p>22 anything that way. I did not look at Wikipedia, I</p> <p>23 didn't think to until Tuesday. So I did try to</p> <p>24 double-check to some extent to make sure I hadn't missed</p> <p>25 anyone that was major.</p>

June 30, 2016

198 to 201

Page 198

1 Q. Did you consider routing vendors as well?

2 MR. WONG: Objection, vague.

3 A. I tried to restrict my attention to switches,

4 given that Arista sells only switches, although they are

5 layer-3 switches. I was trying to think of -- of other

6 switch vendors.

7 BY MR. HOLMES:

8 Q. Are you familiar with Arista's 7500-R product?

9 A. I believe so. That's a big chassis switch

10 they sell.

11 Q. Are you aware as you sit here right now of any

12 switches -- I'm sorry, of any routers that Arista sells?

13 A. I didn't get the last two words?

14 Q. Any routers that Arista sells?

15 MR. WONG: Objection, vague.

16 A. I mean, so what is a router? It used to be

17 clear. Nowadays we have what are called "layer-3

18 switches" and we call them switches, but they do

19 essentially most of the functionality from a router.

20 So you could say the line is quite blurred at this

21 point. I believe Arista markets its product as

22 switches, as layer-3 switches. Maybe sometimes they

23 might call them routers, I didn't take note of that ever

24 happening. I certainly call them switches with my

25 students, but my students understand that that line is

Page 199

1 blurred and that they have routing functionality.

2 BY MR. HOLMES:

3 Q. But you're aware that Cisco sells routers,

4 correct?

5 A. I have one in my living room.

6 Q. And so taking a step back, did you consider any

7 vendors who offer routers when you were performing your

8 analysis of what vendors do and do not potentially use

9 the industry standard CLI, in your opinion?

10 A. I mean I think -- I couldn't name them off the

11 top of my head, but I think most of these vendors offer

12 routers.

13 Q. Did you do anything to verify that?

14 MR. WONG: Objection, vague.

15 A. I mean it wasn't a specific question I thought

16 was important at all. I didn't try to verify that.

17 It's my awareness that many of these vendors sell

18 routers.

19 BY MR. HOLMES:

20 Q. Is there anything else that went into your

21 methodology of how you selected the vendors that you

22 analyzed that you haven't already explained to me?

23 MR. WONG: Objection, vague.

24 A. I mean beyond probing my memory, talking to the

25 attorneys, doing some Web searching, I think that is how

Page 200

1 I built out my list, and I'm still not aware, sitting

2 here today, of any major player that I missed.

3 BY MR. HOLMES:

4 Q. Did you include Huawei?

5 A. Only in the sense that they are discussed a few

6 times in my reports, but I don't think they're one of

7 the 20.

8 Q. Would you consider Huawei to be a major player?

9 MR. WONG: Objection, foundation.

10 A. I think they could be considered to be major.

11 I've never seen one of their routers or switches but

12 I've searchable heard of them. They were made famous to

13 me in 2003 when they got sued, and they're also a famous

14 company for telecom.

15 BY MR. HOLMES:

16 Q. And you haven't performed an analysis of their

17 CLI in support of your expert reports in this case,

18 correct?

19 MR. WONG: Objection, vague.

20 A. I mean I analyzed them in the sense that I

21 discussed their CLI, I discussed the differences, the

22 fact that they use displays of "show undo" instead of

23 "no," and the list goes on, right? There are those

24 distinctions. Same with 3Com, I also discussed that

25 they're similar distinctions for almost the same reason.

Page 201

1 So in that sense I think I could say I do some analysis.

2 BY MR. HOLMES:

3 Q. But you haven't included them in your

4 appendices where you analyze which vendors you believe

5 comply with the industry standard CLI, correct?

6 A. That's correct. If I include Huawei because of

7 the reasons I just noted, that they deliberately swap

8 out "show" or "display" and so forth, they're not going

9 to have show commands that I enumerate in my appendices.

10 BY MR. HOLMES:

11 Q. And so in your opinion, does Huawei use the

12 industry standard CLI?

13 A. So my opinion is they used to. I mean they did

14 something horrible and they copied source code, right.

15 And so they used to. And then they were more or less

16 forced to change to a CLI that I would say is not

17 industry compliant because they failed to use any of the

18 common commands. Now, via trick, I think they overtly

19 just say all you have to do is alias these words back to

20 their Cisco or industry standard or EOS equivalence, and

21 you essentially recover an industry standard CLI which

22 is just an old work-around.

23 Q. Are you familiar with Juniper's Junos CLI?

24 A. I've used it.

25 Q. In your opinion, is Juniper's Junos CLI

June 30, 2016

202 to 205

<p style="text-align: right;">Page 202</p> <p>1 compliant with the industry standard CLI as you've</p> <p>2 defined it in this case?</p> <p>3 A. So when you say the "industry standard," I'm</p> <p>4 going to assume the one that we've been talking about</p> <p>5 all day.</p> <p>6 Q. Well, what I said was "the industry standard</p> <p>7 CLI as you've defined it in this case."</p> <p>8 A. I was trying to expand on what my answer was</p> <p>9 going to be there.</p> <p>10 When I say "the industry standard," I'm talking</p> <p>11 about the IOS-like industry standard. Some people talk</p> <p>12 about Junos as being an alternative industry standard.</p> <p>13 Now, I think that is up for grabs. I mean you could</p> <p>14 argue one way or the other whether that is an</p> <p>15 independent industry standard. I think Cisco believes</p> <p>16 it is because it offers it. It's in one of its</p> <p>17 products. But it certainly does not conform to the</p> <p>18 industry standard we've been talking about.</p> <p>19 Q. So it's potentially a different industry</p> <p>20 standard CLI?</p> <p>21 A. Potentially, yes.</p> <p>22 Q. And have you done anything to investigate</p> <p>23 whether or not Junos CLI would meet your own definition</p> <p>24 of a de facto standard?</p> <p>25 A. As an independent de facto standard, I didn't</p>	<p style="text-align: right;">Page 204</p> <p>1 than 20 networking vendors from your analysis?</p> <p>2 A. I'm not sure if he said that at deposition. He</p> <p>3 certainly says it in his reports.</p> <p>4 Q. Fair enough. Do you recall him at least saying</p> <p>5 that in one of his expert reports?</p> <p>6 A. Yes, I do.</p> <p>7 Q. If it's true that your analysis was based on</p> <p>8 analyzing only one-half of the market, would that change</p> <p>9 your opinions in any way?</p> <p>10 MR. WONG: Objection, vague.</p> <p>11 A. I mean if you were to point out that I missed</p> <p>12 20 other vendors that comprise 80 percent market share</p> <p>13 in this space, embarrassed would not reach the level of</p> <p>14 what I would feel. I don't think that's remotely</p> <p>15 probable. If you point out that there are some players</p> <p>16 who only sell their equipment in Korea that I didn't</p> <p>17 consider, I wouldn't be surprised at all. I never said</p> <p>18 in my reports "and there are no other vendors." All I</p> <p>19 said was that this is "widespread, widely adopted, and</p> <p>20 common," and I certainly tried to include all the major</p> <p>21 players that I knew about and used the criteria I</p> <p>22 already described in building my list.</p> <p>23 MR. HOLMES: I do appreciate your answer,</p> <p>24 although I asked a little bit different question.</p> <p>25 THE WITNESS: I'm sorry.</p>
<p style="text-align: right;">Page 203</p> <p>1 spend any time on that question at all.</p> <p>2 Q. So let's turn to paragraph 180 please.</p> <p>3 A. I'm sorry, already there. Okay, I'm there.</p> <p>4 Q. So in paragraph 180 you say:</p> <p>5 "It is also my opinion that many</p> <p>6 third-party networking vendors that sell</p> <p>7 switches and routers, or who sold switches</p> <p>8 and routers before being acquired or</p> <p>9 ceasing operation, supported and still</p> <p>10 support hundreds of the same disputed CLI</p> <p>11 commands at issue in this case. Based on</p> <p>12 my analysis of user documentation from many</p> <p>13 third-party networking equipment vendors,"</p> <p>14 and you provide a summary of your findings. Do you see</p> <p>15 that?</p> <p>16 A. I see that.</p> <p>17 Q. These are your opinions; is that right?</p> <p>18 MR. WONG: Objection, vague.</p> <p>19 A. These are my opinions. These are my findings.</p> <p>20 BY MR. HOLMES:</p> <p>21 Q. So as we just discussed, you were at</p> <p>22 Dr. Almeroth's deposition, right?</p> <p>23 A. Yes, I was.</p> <p>24 Q. And you heard Dr. Almeroth discuss his opinion</p> <p>25 that he believes you may have omitted up to not more</p>	<p style="text-align: right;">Page 205</p> <p>1 MR. HOLMES: It's okay, I'll re-ask it.</p> <p>2 BY MR. HOLMES:</p> <p>3 Q. If it's true that your analysis was based on</p> <p>4 analyzing only one-half of the market, would that change</p> <p>5 your opinions in any way?</p> <p>6 MR. WONG: Objection, vague.</p> <p>7 A. If that's all -- if that's all you're telling</p> <p>8 me, and if you're saying "half the market" just means by</p> <p>9 putting Aerohive and Juniper side by side, then that</p> <p>10 could be the case. But I don't think it's a fair thing</p> <p>11 to do to say Aerohive and Juniper should be put on the</p> <p>12 same footing. So if you're saying half, simply by</p> <p>13 counting companies, then I don't think it's relevant and</p> <p>14 it wouldn't change my analysis at all, or my opinions.</p> <p>15 BY MR. HOLMES:</p> <p>16 Q. As part of your definition of the industry</p> <p>17 standard CLI, do you anywhere reference market share as</p> <p>18 being a factor that you considered?</p> <p>19 A. When you say "reference," you mean do you mean</p> <p>20 is it written in my report or was it on my mind at the</p> <p>21 time?</p> <p>22 Q. Was it written in paragraph 171 of your report?</p> <p>23 A. 171.</p> <p>24 MR. WONG: Object the question as vague.</p> <p>25 A. In paragraph 171 I say: "It refers to common</p>

June 30, 2016

206 to 209

<p style="text-align: right;">Page 206</p> <p>1 well-known widely-adopted features and functionalities 2 of CLIs." I don't say market share. My intent was to 3 only include large players. And when I say common and 4 well-known and widely-adopted, I'm not thinking of -- 5 I'm not stating anywhere that market share is one of the 6 relevant attributes that I need to have. 7 Now, that said, if you wanted to push back, or 8 somebody wanted to challenge my opinion and say look, 9 you've cited 18 other vendors, and these 18 other 10 vendors are basically defunct companies, and they only 11 operate in Antarctica, and they only have three 12 customers each, and the vast majority of these other 13 players that you've ignored comprise 80 percent of the 14 market, I would think that's a significant challenge to 15 my opinions. But the fact is, the story runs in 16 reverse, that I considered all the major players in my 17 analysis. And even though I don't list it explicitly as 18 one of the criteria that I used, I think it's an 19 important criterion. 20 BY MR. HOLMES: 21 Q. You would agree with me though that Juniper is 22 a major player, right? 23 MR. WONG: Objection, vague. 24 A. The company, yes, absolutely. 25 ///</p>	<p style="text-align: right;">Page 208</p> <p>1 you analyzed were still offering the products that you 2 looked at? 3 A. I know for a fact that some of them are gone. 4 Procket has been absorbed into Cisco. NextTop was 5 acquired by Arista. Some of these companies don't exist 6 any more or have been acquired or merged. 7 Q. So you did consider vendor CLIs that are no 8 longer on the market, correct? 9 A. Yeah, I wasn't trying to give a snapshot of the 10 world as it stands in 2016. I was trying to show 11 widespread adoption by numerous vendors over the last 30 12 or so years of this industry standard CLI. 13 Q. Going back to the question that I think started 14 us off on this train, which is, if it's true that your 15 analysis was based on analyzing only one-half of the 16 market, would that change your opinions in any way? 17 MR. WONG: I think it was asked and answered. 18 A. When you say "one-half of the market," I take 19 into account market share in that question. 20 BY MR. HOLMES: 21 Q. Okay, let me clarify my question then. 22 If it's true that your analysis was based on 23 analyzing only one-half of the vendors who offer 24 switching products in the market, would that change your 25 opinions in any way?</p>
<p style="text-align: right;">Page 207</p> <p>1 BY MR. HOLMES: 2 Q. And in your Appendix where you analyzed various 3 vendors' adoption of command abstractions, as you put 4 it, you didn't analyze Junos in those tables, did you? 5 A. I actually did, and there's an Appendix called 6 "H.JU" I think, or something like that. 7 Q. For Junos, not Junos E? 8 A. No, I mean Junos E when I say Junos in that 9 context. 10 Q. So you're talking about Junos E, not Junos? 11 A. Yes, sir. 12 Q. Okay, so did you analyze Junos? 13 A. You mean series M that's distinct from series E 14 that has this other flavor of CLI? 15 Q. That's correct. 16 A. I did not include that series of products from 17 Juniper in my analysis in the appendices. 18 Q. And you're aware that Junos E is a defunct 19 product, right? 20 MR. WONG: Objection, vague. 21 A. I'm not aware of that. But if you represent 22 that to me, I could imagine it. 23 BY MR. HOLMES: 24 Q. Did you check, prior to submitting your 25 reports, to see whether or not all of the vendors that</p>	<p style="text-align: right;">Page 209</p> <p>1 A. No -- 2 MR. WONG: Objection -- 3 A. -- not if there were 40 minor players that 4 comprise less than one percent of the market, it 5 wouldn't change my opinions at all. 6 BY MR. HOLMES: 7 Q. And would your answer be the same if you had 8 only analyzed one quarter of the vendors who offer 9 switching products in the market? 10 MR. WONG: Same objection, incomplete 11 hypothetical. 12 A. If that one quarter were 20 other companies and 13 those comprised a sum total of 80 percent of the 14 non Cisco market, I would still stand by my opinions. 15 BY MR. HOLMES: 16 Q. What about if that number you analyzed was only 17 five percent of the market, would your opinions be the 18 same? 19 MR. WONG: Same objections. 20 A. As long as whatever percentage of the market by 21 vendor count, not by market share, was 18 companies that 22 comprise the vast majority of non Cisco market share, I 23 wouldn't care if there were a thousand other vendors 24 that had one customer each, it wouldn't matter. 25 ///</p>

<p style="text-align: right;">Page 210</p> <p>1 BY MR. HOLMES:</p> <p>2 Q. How do you factor in market share when you've</p> <p>3 just testified that a number of the vendor CLIs you</p> <p>4 analyzed are no longer even on the market?</p> <p>5 A. Well, as I stated before, the way that I made</p> <p>6 up my list, the first cut was based on market share. I</p> <p>7 thought of Juniper, Brocade, Arista, other major</p> <p>8 players. Then that list was supplemented because I</p> <p>9 learned about relevant actors, often who are now</p> <p>10 defunct, from deposition testimony and other evidence in</p> <p>11 the case that I threw into the mix, but I wasn't trying</p> <p>12 to say NextTop and Juniper are somehow at the same level</p> <p>13 of importance in the market. That would be ridiculous.</p> <p>14 Q. And were there any -- when you were performing</p> <p>15 your analysis, were there any vendors that you</p> <p>16 intentionally excluded?</p> <p>17 A. Junos, not E, was purposely not listed.</p> <p>18 Huawei, which I'm clearly aware of, 3Com which I'm</p> <p>19 clearly aware of because they're talked about, they</p> <p>20 aren't on the list because I know that they have a</p> <p>21 virtually zero command overlap because they deliberately</p> <p>22 rename their commands. So in the cases where there were</p> <p>23 significant players, where it would be a waste of time</p> <p>24 to do the analysis, I didn't do the analysis.</p> <p>25 Q. Can you think of any other vendors as you sit</p>	<p style="text-align: right;">Page 212</p> <p>1 BY MR. HOLMES:</p> <p>2 Q. What type of CLI did they have?</p> <p>3 A. I think they had -- well, it was in Korean, but</p> <p>4 from the pictures, I think it was -- they were showing a</p> <p>5 GUI with -- so I got the impression they don't have a</p> <p>6 CLI, but I could be wrong. I don't speak Korean.</p> <p>7 BY MR. HOLMES:</p> <p>8 Q. I believe you testified earlier that you, over</p> <p>9 the past 48, 72 hours, went and looked up on Wikipedia a</p> <p>10 list of routing and switching vendors, is that right?</p> <p>11 A. Yes.</p> <p>12 Q. Did you go investigate the vendors on that list</p> <p>13 that you had not included in your report, other than the</p> <p>14 names of the vendors you've already mentioned to me?</p> <p>15 A. The vast majority are in my report. I did --</p> <p>16 some of them were in red in Wikipedia, which means</p> <p>17 there's no link, so I couldn't click on it, although I</p> <p>18 could still do a Google search, but they were so obscure</p> <p>19 that nothing came up. But I did not do a disciplined</p> <p>20 careful principled analysis of each of them. I didn't</p> <p>21 have that much time, as you might imagine. I did</p> <p>22 spot-check a couple, spot-check a couple of them as I</p> <p>23 mentioned, but I wouldn't claim to have looked at</p> <p>24 everything.</p> <p>25 Q. I want to turn back to paragraph 180, please.</p>
<p style="text-align: right;">Page 211</p> <p>1 here right now that you thought would be a waste of time</p> <p>2 to do the analysis on?</p> <p>3 A. Certainly vendors that don't have a CLI,</p> <p>4 Linksys which is now part of Cisco, DLink -- no, I'm</p> <p>5 sorry, I do DLink for their switches, not their wireless</p> <p>6 routers, anything that's a networking switch or router</p> <p>7 that doesn't have a CLI also I omitted.</p> <p>8 Q. Do you know how many companies fall under that</p> <p>9 category?</p> <p>10 A. Under which category?</p> <p>11 Q. The category of vendors who offer networking</p> <p>12 switches or routers who do not have a CLI?</p> <p>13 A. I can think of maybe five off the top of my</p> <p>14 head. There are a lot of small players in that market.</p> <p>15 It's kind of a commodity Wal-Mart type market, so a lot</p> <p>16 of Chinese players. I couldn't tell you an exact</p> <p>17 number, but there are a number of them.</p> <p>18 Q. What are the five that you can think of?</p> <p>19 A. Buffalo, Linksys, although I guess I should</p> <p>20 exclude it because it's part of Cisco now, TPlink, I</p> <p>21 guess I can only think of those; I don't know how</p> <p>22 many -- was that three? I guess I can only think of</p> <p>23 three right now -- oh, and Aerohive, right. I think</p> <p>24 they were on the list as well.</p> <p>25 ///</p>	<p style="text-align: right;">Page 213</p> <p>1 The second sentence of paragraph 180 starts with "based</p> <p>2 on my analysis"; do you see that?</p> <p>3 A. I do.</p> <p>4 Q. "Based on my analysis of user documentation</p> <p>5 from many third-party networking equipment vendors,"</p> <p>6 then you provide your findings, right?</p> <p>7 A. Yes.</p> <p>8 Q. Other than user documentation, did you look at</p> <p>9 any other vendor materials when performing your analysis</p> <p>10 as discussed in paragraph 180?</p> <p>11 MR. WONG: Objection, vague.</p> <p>12 A. I certainly considered reams of documents that</p> <p>13 pertained to other vendors beyond just user manuals. In</p> <p>14 the case of Dell, there's a video that puts their CLI</p> <p>15 side by side with Cisco. But as far as coming up with</p> <p>16 the numbers that are enumerated in paragraph 180, those</p> <p>17 are taken out of the appendices, and those appendices</p> <p>18 are generated by examining user manuals.</p> <p>19 BY MR. HOLMES:</p> <p>20 Q. Did you interact with any network devices from</p> <p>21 any of these vendors in order to confirm your findings</p> <p>22 in paragraph 180?</p> <p>23 MR. WONG: Objection, compound.</p> <p>24 A. I have in the past. But in the timeframe in</p> <p>25 which I was doing this analysis, I had access only to</p>

<p style="text-align: right;">Page 214</p> <p>1 manuals. I didn't have access to either an actual</p> <p>2 physical device or a simulator or virtual machine. I</p> <p>3 tried to get it for Dell, I wasn't successful. And so I</p> <p>4 only used manuals for the software tools that I wrote to</p> <p>5 analyze these vendors' CLI command sets.</p> <p>6 BY MR. HOLMES:</p> <p>7 Q. Did you inspect any source code to confirm your</p> <p>8 findings that are listed here in paragraph 180?</p> <p>9 A. I'm making sure that the Stanford code isn't</p> <p>10 listed because that's source code I did view. No source</p> <p>11 code on any of these vendors did I view.</p> <p>12 Q. Did you interview any of the -- any</p> <p>13 representatives from any of these companies to confirm</p> <p>14 your findings?</p> <p>15 A. I mean I didn't talk to anyone, so I relied</p> <p>16 certainly on their testimony as memorialized in the</p> <p>17 transcripts of their depositions and materials produced and so</p> <p>18 forth, but I didn't directly interview anybody from any</p> <p>19 of these companies.</p> <p>20 Q. You mentioned that you wrote software tools to</p> <p>21 analyze the vendor CLIs, is that right?</p> <p>22 A. Well, to be more precise, I wrote software</p> <p>23 tools to analyze the manuals that are associated with</p> <p>24 the vendor CLIs.</p> <p>25 Q. Okay, can you walk me through what those tools</p>	<p style="text-align: right;">Page 216</p> <p>1 these things, and I have some examples, span 20 lines</p> <p>2 because they're so complicated, so many options and</p> <p>3 switches and parameters, they don't fit on a single line</p> <p>4 of text, and I wanted to collect them up into a single</p> <p>5 line. So I wrote a script in Python that went through</p> <p>6 and tried to figure out where these command expressions</p> <p>7 live within this text file and how to reconstitute them</p> <p>8 from a multi-line expression into a single line, and</p> <p>9 then spit them out into a second text file which is a</p> <p>10 collection of all command expressions.</p> <p>11 Once I had those collected together, I then ran</p> <p>12 another script that I wrote that takes each of the</p> <p>13 command expressions and interpolates them into all</p> <p>14 possible valid commands, things you could actually type</p> <p>15 into a CLI. It would be accepted as valid versus</p> <p>16 generating an error. And this would mean something like</p> <p>17 when my program would see "show IP interface [brief],"</p> <p>18 it would spit out two things, show IP interfaces, and</p> <p>19 then a second line, show interfaces brief. So with and</p> <p>20 without that option included.</p> <p>21 So obviously this would expand the number of</p> <p>22 command expressions and become a larger file of actual</p> <p>23 issuable commands. And I would do that for every</p> <p>24 manual, do that for all the Cisco manuals and all the</p> <p>25 Dell manuals. Then I would do a head-to-head comparison</p>
<p style="text-align: right;">Page 215</p> <p>1 were.</p> <p>2 A. Sure. So some of these manuals were produced</p> <p>3 as .TXT files, which means they're just raw ASCII, no</p> <p>4 dressing around them. Many of them were PDF which I'm</p> <p>5 sure you're familiar with. So to avoid the impossible</p> <p>6 task of manually cutting and pasting out of a PDF, I</p> <p>7 used what's called a scraping tool. And the point of</p> <p>8 that tool is to process the PDF, and I won't belabor you</p> <p>9 with all of the details about how PDF documents are put</p> <p>10 together. But they're essentially boxes that float</p> <p>11 inside the document, some of which contain layout</p> <p>12 information, font information, and some have text. And</p> <p>13 I was interested in the actual text within those</p> <p>14 documents.</p> <p>15 And so I used a tool, it's called "PDF to TXT,"</p> <p>16 I think I name it somewhere in my report, that has some</p> <p>17 parameters that say things about the tolerances of these</p> <p>18 boxes, when to join, when to split and so forth that let</p> <p>19 me extract all of the text, not just the CLI command</p> <p>20 expressions that are expressions in this context, along</p> <p>21 with all of the other text in the documentation into a</p> <p>22 .TXT file. That was the first step. So in short, pull</p> <p>23 the text out of the PDF file, get it into another file.</p> <p>24 Then after that, I wanted to take the command</p> <p>25 expressions and get them all on one line. Now some of</p>	<p style="text-align: right;">Page 217</p> <p>1 looking for commonality between the two. And that was</p> <p>2 the basis for what you see in Appendix I in my analysis.</p> <p>3 Q. And when you say "head-to-head comparison</p> <p>4 looking for commonality," what criteria did you use to</p> <p>5 determine that?</p> <p>6 A. I use the simple criterion that two strings are</p> <p>7 equal if they have the same characters in the same</p> <p>8 order.</p> <p>9 Q. Is there anything else you considered when</p> <p>10 determining if two different commands were similar or</p> <p>11 not?</p> <p>12 A. I wasn't doing similar, I was doing equal.</p> <p>13 Equal is pretty much black and white.</p> <p>14 Q. So, identical to one another?</p> <p>15 A. Correct.</p> <p>16 Q. And if a command was similar but not identical,</p> <p>17 would that have been counted in paragraph 180 as being a</p> <p>18 match?</p> <p>19 A. I'm sorry, I'm explaining just part of what I</p> <p>20 did which was in the Dell analysis in Appendix I.</p> <p>21 Paragraph 180 also talks about some of the manual work</p> <p>22 that went into -- give me a second, I'm sorry -- I think</p> <p>23 I just described to you, I'm sorry, how I generated</p> <p>24 Appendix I. This is actually a different part of my</p> <p>25 report that used a different methodology, and I</p>

<p style="text-align: right;">Page 218</p> <p>1 apologize if I just wasted some of our time.</p> <p>2 Q. No, no, that's fine.</p> <p>3 So just for clarity, the methodology you just</p> <p>4 explained is what you applied to create Appendix I?</p> <p>5 A. That's correct, and which is exclusively a Dell</p> <p>6 analysis to Cisco.</p> <p>7 Q. Right, and that does not apply to the analysis</p> <p>8 that you set forth in paragraph 180, is that correct?</p> <p>9 A. That's correct. In paragraph 180, we're</p> <p>10 talking about a manual search, both means, in other</p> <p>11 words, by hand and in the manual, where I had to go and</p> <p>12 identify by hand where each of the disputed CLI command</p> <p>13 abstractions occur in one of the various manuals</p> <p>14 produced. And it was either there or not. And I</p> <p>15 annotate that in Appendix H for each of the vendors.</p> <p>16 Q. So you did that counting, that's reflected in</p> <p>17 Appendix H, manually?</p> <p>18 A. That's correct. I didn't use a program there.</p> <p>19 Q. And what criteria did you use to determine if</p> <p>20 there was a match or not as between two different</p> <p>21 command abstractions as you refer to them?</p> <p>22 A. So for some command abstractions, they are</p> <p>23 valid issuable commands. 220 out of the 508 are</p> <p>24 issuable and valid on their own.</p> <p>25 If that appeared anywhere in the relevant</p>	<p style="text-align: right;">Page 220</p> <p>1 in between. If they're present, then that's a match, if</p> <p>2 not, it's a miss.</p> <p>3 Q. And that is the methodology that you applied</p> <p>4 when formulating Appendix H?</p> <p>5 A. Yes.</p> <p>6 Q. Does that apply as well to Appendix G?</p> <p>7 A. Can I look at Appendix G?</p> <p>8 MR. HOLMES: Feel free.</p> <p>9 MR. WONG: You can look at whatever you</p> <p>10 need to.</p> <p>11 BY MR. HOLMES:</p> <p>12 Q. I note you used the words "command expression"</p> <p>13 a few times.</p> <p>14 A. Right, and I do that deliberately. So when I</p> <p>15 say "expression," I mean the form of the command that</p> <p>16 has the braces, bars, and brackets. And it can be</p> <p>17 evaluated by an expression evaluator. When I refer to</p> <p>18 "abstraction," I mean in the form where it's possibly a</p> <p>19 subset of the full command, as Cisco lists it out in</p> <p>20 508. So I think I was careful to make that distinction.</p> <p>21 BY MR. HOLMES:</p> <p>22 Q. Thank you. Can you verify that the analysis</p> <p>23 that is reflected in Appendix G was created using the</p> <p>24 methodology that you just walked me through?</p> <p>25 A. Yes, that's correct.</p>
<p style="text-align: right;">Page 219</p> <p>1 manual or in a relevant manual where the syntactic</p> <p>2 expression could be evaluated to generate the same exact</p> <p>3 syntax as what was accused, I counted that as a match.</p> <p>4 If there was no way to get the same syntax, I counted</p> <p>5 that as a miss. That was the methodology I applied.</p> <p>6 Now, it's a little trickier in the case where</p> <p>7 the accused command abstraction is not issuable, it's</p> <p>8 not valid. There are many cases, most of the cases in</p> <p>9 Cisco's list where it's incomplete and you need more.</p> <p>10 So let's take an example like "user SH key," let's say.</p> <p>11 So that appears in the accused list. User name, SSH</p> <p>12 key. When you actually issue that --</p> <p>13 (Reporter clarification.)</p> <p>14 THE WITNESS: SSH key, which is spelled</p> <p>15 S-S-H-K-E-Y.</p> <p>16 A. -- sorry. The way that you actually would have</p> <p>17 to enter that into a Cisco device is you would say user</p> <p>18 name, space, then you would give a user name of your</p> <p>19 choosing, space, SSH key, space, then an SSH key, which</p> <p>20 is another user chosen parameter.</p> <p>21 Now, when I look in the manual to see if a</p> <p>22 vendor supports that, I'm going to obviously have to</p> <p>23 apply my expertise in being able to read these</p> <p>24 expressions and say do those two key words appear in</p> <p>25 that order with some parameters or user-supplied values</p>	<p style="text-align: right;">Page 221</p> <p>1 MR. HOLMES: We've been going an hour. Take a</p> <p>2 break?</p> <p>3 MR. WONG: Sure.</p> <p>4 THE VIDEOGRAPHER: This marks the end of DVD 4</p> <p>5 to the John Black deposition. Counsel, the time is 3:46</p> <p>6 p.m. We're going off the record.</p> <p>7 (Recess taken.)</p> <p>8 THE VIDEOGRAPHER: Counsel, we're now on the</p> <p>9 record. The time is 4:05 p.m. This marks the beginning</p> <p>10 of DVD 5 to the deposition of John Black.</p> <p>11 BY MR. HOLMES:</p> <p>12 Q. Dr. Black, would you please turn to paragraph</p> <p>13 192 in your Opening Report.</p> <p>14 A. 192 you said?</p> <p>15 Q. Yes, sir, page 89, paragraph 192.</p> <p>16 A. I'm there.</p> <p>17 Q. Okay. Now paragraph 192 says:</p> <p>18 "With respect to the disputed CLI</p> <p>19 command responses, as I discuss further</p> <p>20 in this report, those asserted responses</p> <p>21 consist of descriptive phrases regarding</p> <p>22 switch features and functionality. The</p> <p>23 substance of the phrases derive from the</p> <p>24 functionality of the device and industry</p> <p>25 terminology used to define that</p>

June 30, 2016

250 to 253

<p style="text-align: right;">Page 250</p> <p>1 is comprised of only a single command?</p> <p>2 A. No, I believe, and I think this is a change in</p> <p>3 Cisco's contentions which is extremely common. I</p> <p>4 believe in his latest report he says there are now 11,</p> <p>5 and he identifies only 11 words that start a variety of</p> <p>6 commands. And I don't think, to answer your question, I</p> <p>7 don't think any of those represents a single command,</p> <p>8 but I'd have to check to be sure.</p> <p>9 Q. Thank you. Let's move on to Exhibit E --</p> <p>10 (Discussion off the record.)</p> <p>11 MR. HOLMES: We can go off the record.</p> <p>12 THE VIDEOGRAPHER: The time is 4:49 p.m. Off</p> <p>13 the record.</p> <p>14 (Recess taken.)</p> <p>15 THE VIDEOGRAPHER: The time is 4:50 p.m. We're</p> <p>16 now back on the record.</p> <p>17 BY MR. HOLMES:</p> <p>18 Q. Okay, can you please tell me what Appendix E</p> <p>19 is?</p> <p>20 A. Appendix E is an attempt to identify, from the</p> <p>21 disputed commands, the two-level hierarchies. And by</p> <p>22 that, I mean taking now the first two words from every</p> <p>23 one of the disputed 514 -- back then, that's what it</p> <p>24 was -- programmatically remove them, remove the</p> <p>25 duplicates, then put them in a list alongside whether</p>	<p style="text-align: right;">Page 252</p> <p>1 A. It's a summary and sorted by the second column,</p> <p>2 yes.</p> <p>3 Q. And did you compile this Appendix yourself?</p> <p>4 A. With a little help from Excel.</p> <p>5 Q. That's a program, not a person?</p> <p>6 A. That's correct.</p> <p>7 Q. Okay. Let's move on to Appendix G please. Can</p> <p>8 you tell me what Appendix G is?</p> <p>9 A. This is a list of, I believe, back then, 514</p> <p>10 command abstractions in the left column, and in the</p> <p>11 right column the number of vendors for the vendors that</p> <p>12 I looked at, not including Cisco, Arista, who support</p> <p>13 the given command abstraction, and this one is sorted by</p> <p>14 the right-hand column.</p> <p>15 Q. And is this a summary of the data you've</p> <p>16 compiled in Exhibit H or Appendix H?</p> <p>17 A. Yes.</p> <p>18 Q. And you compiled this data yourself?</p> <p>19 A. Once again, using Excel, but yes.</p> <p>20 Q. Now, I'd like to direct your attention to</p> <p>21 paragraph 191 of your Opening Report. Keep Exhibit G</p> <p>22 out on the side.</p> <p>23 A. Okay.</p> <p>24 Q. I'd like to discuss both with the other.</p> <p>25 A. Sure.</p>
<p style="text-align: right;">Page 251</p> <p>1 they appeared in the relevant vendor manuals, just like</p> <p>2 in Appendix F -- I'm sorry, in Appendix D.</p> <p>3 BY MR. HOLMES:</p> <p>4 Q. What was the purpose of providing Appendix E?</p> <p>5 A. At the time I wrote this report, I believed</p> <p>6 that Cisco was also contending that some of its</p> <p>7 hierarchies could be two-word hierarchies. And so I</p> <p>8 thought it was important to analyze the overlaps in</p> <p>9 light of that possible contention. As I've noted,</p> <p>10 Professor Almeroth has now identified only 11</p> <p>11 single-word hierarchies I assume representing Cisco's</p> <p>12 new contentions.</p> <p>13 Q. Okay, thank you.</p> <p>14 Before we move on, did you manually do the</p> <p>15 analysis and compile the data that's reflected in</p> <p>16 Appendix E?</p> <p>17 A. Yes, it's not hard, given Appendix H, to simply</p> <p>18 count them up.</p> <p>19 Q. Okay, thank you.</p> <p>20 Appendix F, I think that's where we're going</p> <p>21 with this. So can you tell me what Appendix F is?</p> <p>22 A. Appendix F is basically just a count of what we</p> <p>23 just looked at.</p> <p>24 Q. So this represents a -- fair to say it's a</p> <p>25 summary of Appendix E?</p>	<p style="text-align: right;">Page 253</p> <p>1 Q. Page 88.</p> <p>2 A. Okay. What paragraph again, please?</p> <p>3 Q. 191.</p> <p>4 A. 191, I'm there.</p> <p>5 Q. Very bottom. Paragraph 191 says:</p> <p>6 "With respect to the disputed CLI</p> <p>7 commands, I also provide a summary of the</p> <p>8 most widely adopted CLI commands in</p> <p>9 Appendix G." Do you see that?</p> <p>10 A. I do see that.</p> <p>11 Q. So what did you mean by "widely adopted" in</p> <p>12 this particular paragraph?</p> <p>13 A. I meant simply that if you can look to</p> <p>14 Appendix G and take, for example, the first command</p> <p>15 abstraction there listed, "IP address," which I will</p> <p>16 note is not a complete command in this case, that we</p> <p>17 have 17 other non Cisco, non Arista vendors who support</p> <p>18 that command abstraction, and that just glancing down</p> <p>19 this list, that we can go page after page and still find</p> <p>20 at least six, seven, many cases ten or more other</p> <p>21 vendors supporting that command abstraction.</p> <p>22 Q. Now, the commands that are listed here in</p> <p>23 Appendix G -- this is not the complete set of the 508</p> <p>24 asserted commands in this case, right?</p> <p>25 A. It would have been 514 back then, and I believe</p>


June 30, 2016

254 to 257

<p style="text-align: right;">Page 254</p> <p>1 the total number -- I don't have it numbered. I think</p> <p>2 it's less, I'm pretty sure it's less, not all of them.</p> <p>3 Q. And why is that?</p> <p>4 A. Well, as you get to the back of the document,</p> <p>5 we get down to one. Then if I'd included the rest,</p> <p>6 they'd be zero.</p> <p>7 Q. So if a -- if an asserted command abstraction,</p> <p>8 to use that term, is not listed in Appendix G, is that</p> <p>9 because there were zero vendors supporting that command,</p> <p>10 not including Cisco and Arista?</p> <p>11 MR. WONG: Objection, vague.</p> <p>12 A. I wouldn't say there were zero vendors</p> <p>13 supporting it, I would say there were zero vendors that</p> <p>14 I was able to find in the manuals I had available to me.</p> <p>15 Some cases, I only had one manual. In the case of</p> <p>16 Procket, some manuals were destroyed as you probably</p> <p>17 know. I didn't have every manual. But for the manuals</p> <p>18 I did have, I found zero in those cases, yes.</p> <p>19 BY MR. HOLMES:</p> <p>20 Q. And in those cases where you found zero, would</p> <p>21 you consider those commands to be part of the industry</p> <p>22 standard CLI?</p> <p>23 MR. WONG: Objection, incomplete hypothetical.</p> <p>24 A. I'd like to look specifically at those commands</p> <p>25 with that question in mind, but probably not.</p>	<p style="text-align: right;">Page 256</p> <p>1 above the line is in or out. I wouldn't want to use</p> <p>2 that as the metric. Appendix G is not trying to</p> <p>3 establish which commands are in and out of the industry</p> <p>4 standard, it's trying to establish the fact that no</p> <p>5 reasonable person could look at this and say there is no</p> <p>6 industry standard, there's no widespread adoption, every</p> <p>7 command is a complete rarity. That would be</p> <p>8 inconsistent with what's sitting on this document in</p> <p>9 front of me.</p> <p>10 Q. But would you tell somebody that a command only</p> <p>11 being used by Cisco, Arista, and one other vendor is an</p> <p>12 industry standard command? Is that your testimony?</p> <p>13 A. Once again, for a given command, I couldn't</p> <p>14 tell you whether a command is part of or not unless it's</p> <p>15 something that is clearly widely adopted by lots and</p> <p>16 lots of vendors, as many, many of these are. If you can</p> <p>17 point me to a specific command and ask me, I probably</p> <p>18 won't be able to answer.</p> <p>19 Q. How do I know if it's clearly widely adopted by</p> <p>20 lots and lots of vendors? Based on the objective data</p> <p>21 that you've got here, can you tell me how I know when</p> <p>22 I'm in the standard or outside the standard based on</p> <p>23 your definition that you just provided?</p> <p>24 A. I mean people in my cohort, my friends, people</p> <p>25 in the networking industry, they would all look at this</p>
<p style="text-align: right;">Page 255</p> <p>1 BY MR. HOLMES:</p> <p>2 Q. And what about the commands where you only have</p> <p>3 one vendor listed here in the right-hand column of</p> <p>4 Appendix G, would you still consider those commands to</p> <p>5 be part of the industry standard CLI?</p> <p>6 MR. WONG: Objection, incomplete hypothetical.</p> <p>7 A. I wouldn't want to use just that metric to make</p> <p>8 a determination. Let me give you an example. So</p> <p>9 there's some commands that start with VRRP. That's a</p> <p>10 protocol that a lot of vendors don't support, right.</p> <p>11 And so would I say simply because it's not supported</p> <p>12 it's not part of the industry standard? I don't know.</p> <p>13 We're certainly in a gray area in that question.</p> <p>14 As I testified to earlier, there's certain</p> <p>15 commands, and I think we have plenty of examples in the</p> <p>16 front of the document which are incontestably part of</p> <p>17 the industry standard CLI, and I think there are also</p> <p>18 commands that are incontestably not part of it because</p> <p>19 they're specific to Arista, let's say. You could argue</p> <p>20 that these are in the gray area -- go ahead.</p> <p>21 Q. Sorry, I didn't mean to interrupt you.</p> <p>22 A. Please.</p> <p>23 Q. At what point in Appendix G do I get out of the</p> <p>24 "gray area," using your terminology?</p> <p>25 A. I don't draw a line here saying everything</p>	<p style="text-align: right;">Page 257</p> <p>1 paper, and I would say, is there widespread adoption? I</p> <p>2 mean we've got 17, 16, 15 different vendors all using</p> <p>3 the same thing, if you're willing to grant me command</p> <p>4 abstractions at least, similar CLI commands, do you</p> <p>5 think that that command is in widespread common use?</p> <p>6 None of my friends or colleagues are going to go no,</p> <p>7 it's a complete rarity, there's no such thing as a</p> <p>8 common widespread usage of any of these commands. I</p> <p>9 think that would be an unreasonable thing for them to</p> <p>10 say and I don't think any reasonable mind could say</p> <p>11 that.</p> <p>12 Q. Do you think any reasonable mind could say that</p> <p>13 a command where you've only found one other vendor using</p> <p>14 it is part of an industry standard though?</p> <p>15 A. I mean, I've already admitted there definitely</p> <p>16 is room for disagreement in some of these less</p> <p>17 widely-used command abstractions. I'm not contesting</p> <p>18 that there's a gray area at some point. All I'm saying</p> <p>19 is that it's plainly evident there are commands, and a</p> <p>20 lot of them, that are used by a huge variety of vendors.</p> <p>21 Q. There's no cut-off here in Appendix G where you</p> <p>22 say above seven is widely used, and below seven is not</p> <p>23 widely used?</p> <p>24 A. There is no cut-off, nor would I think that</p> <p>25 that would be an appropriate way to delineate the set.</p>

June 30, 2016

286 to 289

<p style="text-align: right;">Page 286</p> <p>1 THE REPORTER: Transcript order: Is there an</p> <p>2 expedite or rough, anything?</p> <p>3 MR. HOLMES: The rough, yes. Otherwise, no.</p> <p>4 MR. WONG: I think that's right. Same here.</p> <p>5 THE REPORTER: Thank you, counsel.</p> <p>6 -o0o-</p> <p>7 THE VIDEOGRAPHER: All right, this marks the</p> <p>8 end of DVD 5 of 5 and concludes today's deposition of</p> <p>9 John Black. The time is 5:46 p.m. We're going off the</p> <p>10 record. Thank you, counsel.</p> <p>11 (Deposition adjourned at 5:46 p.m.)</p> <p>12 -o0o-</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 288</p> <p style="text-align: center;">CERTIFICATE OF REPORTER</p> <p>1</p> <p>2</p> <p>3 STATE OF CALIFORNIA)</p> <p>4 ss:)</p> <p>5 COUNTY OF SAN FRANCISCO)</p> <p>6</p> <p>7 I, Deborah Mayer, a Certified Shorthand</p> <p>8 Reporter duly licensed and qualified in and for the</p> <p>9 State of California, do hereby certify that there came</p> <p>10 before me on Thursday, June 30, 2016, at 50 California</p> <p>11 Street, 21st Floor, San Francisco, California, 94111,</p> <p>12 the following named person:</p> <p>13</p> <p>14 JOHN R. BLACK, Ph.D.,</p> <p>15 who was duly sworn to testify to the truth, the whole</p> <p>16 truth, and nothing but the truth of knowledge concerning</p> <p>17 the matters in controversy in this proceeding, who was</p> <p>18 thereupon examined under oath, whose examination was</p> <p>19 reduced to typewriting under my supervision, and that</p> <p>20 this deposition is a true record of the testimony given</p> <p>21 by said witness.</p> <p>22 I further certify, pursuant to FRCP 19</p> <p>23 Rule 30(e)(1), that the signature of the deponent:</p> <p>24</p> <p>25 <u> X </u> was requested by the deponent or a party</p> <p>before the completion of the deposition;</p> <p><u> </u> was not requested by the deponent or a</p> <p>party before the completion of the deposition.</p> <p>I further certify that I am neither attorney or</p> <p>counsel for, nor related to, nor employed by any of the</p> <p>parties to the action in which this deposition is taken,</p> <p>and that I am not a relative or employee of any attorney</p> <p>or counsel employed by the parties hereto or financially</p> <p>interested in this matter.</p> <p>ss: </p> <p>DEBORAH MAYER, RPR CRR CRP CLR</p> <p>CALIFORNIA CSR 9654</p>
<p style="text-align: right;">Page 287</p> <p style="text-align: center;">CERTIFICATE OF DEPONENT</p> <p>1</p> <p>2</p> <p>3 I, the undersigned, declare, under the penalty</p> <p>4 of perjury, that I have read the foregoing transcript,</p> <p>5 and I have made any corrections, additions, or deletions</p> <p>6 as I deemed necessary. The foregoing is a true and</p> <p>7 correct transcript of my testimony contained therein.</p> <p>8</p> <p>9 Dated: _____ Signed at: _____</p> <p style="text-align: right;">(City, State)</p> <p>10</p> <p>11</p> <p>12 BY: _____</p> <p style="text-align: right;">JOHN R. BLACK, Ph.D.</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25 ///</p>	<p style="text-align: right;">Page 289</p> <p>1 U.S. LEGAL SUPPORT, INC.</p> <p>2 44 Montgomery Street, Suite 550</p> <p>3 San Francisco, California 94104</p> <p>4 (415) 362-4346</p> <p>5</p> <p>6 To: JOHN R. BLACK, Ph.D.</p> <p>7 c/o RYAN K.M. WONG, ESQ.</p> <p>8 KECKER & VAN NEST</p> <p>9 633 Battery Street</p> <p>10 San Francisco, CA 94111</p> <p>11</p> <p>12 Re: CISCO SYSTEMS, INC. v. ARISTA NETWORKS, INC.</p> <p>13</p> <p>14 Dear Dr. Black:</p> <p>15 Please be advised that the original transcript of your</p> <p>16 deposition in the above-entitled matter is available for</p> <p>17 reading and signing. The transcript will be held in our</p> <p>18 office and made available for your review for 30 days.</p> <p>19</p> <p>20 If it is more convenient for you to read a copy of the</p> <p>21 transcript and waive signature of the original</p> <p>22 transcript, please notify our office by letter, sent by</p> <p>23 certified or registered mail, of any changes made.</p> <p>24 In the event you do not sign your deposition transcript</p> <p>25 within thirty (30) days of receipt of this letter, your</p> <p>testimony may be used with the full force and effect as</p> <p>though it had been read, corrected, and signed.</p> <p>If you are represented by counsel in this matter, you</p> <p>may wish to ask your attorney how to proceed. If you</p> <p>are not represented by counsel and wish to review your</p> <p>transcript, please contact our office to arrange an</p> <p>appointment to review your deposition.</p> <p>Thank you for your cooperation in this matter.</p> <p>Sincerely,</p> <p>Deborah Mayer, California CSR 9654</p> <p>for U.S. LEGAL SUPPORT, INC.</p> <p>cc: All Counsel</p> <p>File</p>